

Docket No. 10010484-2

Amendments to the Claims:

There are no amendments to the claims.

Status of Claims:

Claims 4 and 6 are pending for examination.

Claims n/a are added by the present amendment.

Claims n/a are canceled by the present amendment.

Claims 4 and 6 are in independent form.

1-3. (Canceled).

4. (Previously Presented) A fluid ejection device comprising:

an internal power supply path;

a power regulator providing an offset voltage from the internal power supply path voltage, the power regulator including a self-calibration circuit adapted to determine a regulation band of the power regulator defined by a lower set point offset voltage and an upper set point offset voltage;

a group of nozzles;

a corresponding group of firing resistors; and

a corresponding group of switches controllable to couple a selected firing resistor of the group of firing resistors between the internal power supply path and the offset voltage to thereby permit electrical current to pass through the selected firing resistor to cause a corresponding selected nozzle to fire;

wherein the power regulator further includes a feedback amplifier having a first input coupled to an input offset voltage, a second input coupled to a feedback line, and an output coupled to a drive line;

wherein a selected switch corresponding to a selected firing resistor has a control gate controlled by the drive line;

wherein the selected firing resistor of the group of firing resistors includes a first terminal and a second terminal coupled to the feedback line, wherein the drive line provides the offset

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voltage to the feedback line and the second terminal of the selected firing resistor through the selected switch;

wherein the self-calibrating circuit includes:

a regulation detector configured to compare the input offset voltage at the first input of the feedback amplifier and the offset voltage on the feedback line and provide an in regulation signal which is activated based on the power regulator being in regulation.

5. (Canceled)

6. (Previously Presented) A fluid ejection device comprising:

an internal power supply path;

a power regulator providing an offset voltage from the internal power supply path voltage, the power regulator including a self-calibration circuit adapted to determine a regulation band of the power regulator defined by a lower set point offset voltage and an upper set point offset voltage;

a group of nozzles;

a corresponding group of firing resistors; and

a corresponding group of switches controllable to couple a selected firing resistor of the group of firing resistors between the internal power supply path and the offset voltage to thereby permit electrical current to pass through the selected firing resistor to cause a corresponding selected nozzle to fire;

wherein the power regulator further includes a feedback amplifier having a first input coupled to the offset voltage, a second input coupled to a feedback line, and an output coupled to a drive line;

wherein a selected switch corresponding to a selected firing resistor has a control gate controlled by the drive line;

wherein the selected firing resistor of the group of firing resistors includes a first terminal and a second terminal coupled to the feedback line, wherein the drive line provides the offset voltage to the feedback line and the second terminal of the selected firing resistor through the selected switch;

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wherein the selected switch is coupled between the internal power ground and the second terminal of the selected firing resistor.

7-25. (Canceled).